

MORGAN & FINNEGAN, L.L.P.

JOHN D. FOLEY Juhn G. Polez Juhn A. Diaz Thomas P. Dowling John C. Yassil Warren H. Dotert ALFRED P. EWERTT DAYID H. PFEFFER HARRY G. MARCUS ROBERT & PAULSON A ROBERT DAILEY EUGENE MOROZ JOHN F. SWEENEYT ARPOLD I. RADT

JEROME D. LEE POGER S. SMITH THOMAS I. O'BRIEN

RICHARD C. WITTE" JOHN P. SINNOTT NED W. BRANTHOVER

COUNSCL JOHN D. MORGAN

1893-1939 HOBART N. DURKAM

1930-1969

GRANVILLE M. PINE 1939-1984

CHRISTOPHER A. HUGHES WILLIAM S. FEILEAT

JANET DORE

JOSEPH A. CALVARUSO

JAMES W. GOULDT RICHARD C. KOMBON ISRAEL BLUM CHRISTOPHER IL HU BARTHOLOMEW VERDIRAME Bartholomew Verdirame Dickerson M. Downing Maria C. H. Lin Joseph A. Degirolamo Christopher E. Chalsen Mighael A. Nicodema Michael P. Dougherty

GEORGE & FINNEGAN, JR. RESIDENT PARTHERS IN WASHINGTON HARRY F. MANBECH, JR. # †
FREDERICK F. CALVETTIT

A Registered Limited Liability Partnership 345 PARK AVENUE **NEW YORK, NEW YORK 10154-0053**

> TEL.: (212) 758-4800 TELEX 421792 FACSIMILE: (212) 751-6849

WASHINGTON OFFICE 1299 PENNSYLVANIA AVENUE, N. W. SUITE BEO WASHINGTON, D.C. 20004 TEL.: (202) 457-7887

FACSIMILE: (202) 657-7929 WRITER'S DIRECT DIAL NUMBER:

(212) 415-8559

October 16, 1995

THOMAS M. HAMMOND®† EUGENE C. QZUCIDLO®† ANDREW M. RIDDLES BETH J. ATLAS SCOTT D. GREENBERG EDWARD A. PENHINGTON®+ MARK LEE HOGGE®† GRUCE D. DERENZI MIDGE M. MYMAN MARK J. ABATE BARRY A SCHINDLER JOHN T. GALLAGHER STÉVEN F. METER GABRIEL P. KRALIK TONY Y, PEZZANO BRUCE D. RADIN AMDREA L. WAYDA ELAINE J. KAMAN DESIREE M. STAHL MARY J. MORGY ROBERT K. GÖETHALS KENNETH M. SONNENFELD JOHN W. OSBORNE MICHAEL S. MARCUS"† RICHARD K. WARTHER MICHAEL M. MURRAT®

" NOT ADMITTED IN NEW YORK T ADMITTED IN WASHINGTON, D.C. CINDY M, ZELSON
LIEF R. SIGMOND, JR.=
LAURENCE J. BROMBERG
JEAN E. SHIMOTAKET
M. CARAGM NOONET
HOWARD M. FLAXMAN®T WALTER G. HANCHUK! JEFFREY L OGLEE CHARLES M. FISH OLIVER A. ZITZMANN OLIVER A. ITI ZMAMY GCOTT B. HOWARD PETER M. FILL RICHARD B. LEBLANC MEATHER L. CREPS RENNETH B. WEITZMAN RICHARD STRAUSSMAN JAMPS W. GIBCOU JAMES M. GIBSON

CINDY M. ZELSON

SCIENTIFIC ADVISORS KATHEYN M. BROWN, Ph.Q. LESLIE A. SERUNIAN, Ph.D. DOROTHY R. AUTH, Ph.D. DAVID V. ROSSI, Ph.O. CAROL GRUPPI, Ph.D. RICHARD W. BORK, Ph.D.

FOREIGN LAW ADVISOR RYOSUKE FUJIMOTO

David W. Beehler, Esq. Robins, Kaplan, Miller & Ciresi 2800 LaSalle Plaza 800 LaSalle Avenue Minneapolis, MN 55402-2015



RECEIVED DATE 10/20/195 BY DAVID W. BEEHLER ROBINS, KAPLAN, MILLER & CIRESI

Re:

ARCO et al. v. Unocal et al. Case No. CV-95-2379 RG (JRx)

Dear Mr. Beehler:

Set forth below is an identification of additional prior art upon which Plaintiffs may rely to show that Unocal's U.S. Patent No. 5,288,393 is invalid and/or unenforceable and to support the allegations set forth in Plaintiffs' Complaint.

PATENTS AND CORRESPONDING FILE HISTORIES:

1. RE 20,596 Taylor et al.: PROCESS FOR MANUFACTURING MOTOR

FUEL 12/21/37

2. 2,401,983 Stanly, A.L. et al.: MOTOR FUELS

06/11/46

MORGAN & FINNEGAN, L.L...

Oct. 31. 1995 2:36PM

David W. Beehler, Esq. October 16, 1995 Page 2

3.	2,142,937	Deanesly, R.M. et al.: PRODUCTION OF HIGHER BOILING HYDROCARBONS FROM OLEFINS 01/03/39
4.	2,204,215	Greensfelder, B.S. et al.: MANUFACTURE OF MOTOR FUEL 06/11/40
5.	2,407,716	Marschner: SUPERFUEL 9/17/46
6.	2,407,717	Marschner: AVIATION SUPERFUEL 9/17/46
7.	2,411,582	McCulloch: AVIATION FUEL 11/26/46
8.	2,495,648	Voge, H.H. et al.: HYDROCARBON TREATING PROCESS 01/24/50
9.	2,939,836	Koome et al.: DESTRUCTIVE HYDROGENATION OF HEAVY CYCLE OILS 06/07/60
10.	2,944,003	Ritedisnlj et al.: PRODUCTION OF AVIATION GASOLINE 07/05/60
11.	3,156,640	Hart, M.T.: COMBINED HYDROISOMERIZATION- DESULFURIZATION PROCESS 11/10/64
12.	4,429,173	Hutson, Jr. et al.: PRODUCTION OF HIGH-OCTANE UNLEADED MOTOR FUEL BY ALKYLATION OF ISOBUTANE WITH ISOAMYLENES OBTAINED BY DEHYDROGENATION OF ISOPENTANE 01/31/84
13.	4,525,174	Croudace: METHOD AND FUEL COMPOSITION FOR CONTROL OF OCTANE REQUIREMENT INCREASE 06/25/85

MORGAN & FINNEGAN, L.L...

David W. Beehler, Esq. October 16, 1995 Page 3

14.	4,600,408	Jessup et al.: GASOLINE COMPOSITIONS CONTAINING CARBONATES 07/15/86
15.	4,602,919	Jessup et al.: GASOLINE COMPOSITIONS CONTAINING MALONATES 07/29/86
16.	4,647,292	Jessup et al.: GASOLINE COMPOSITION CONTAINING ACID ANHYDRIDES 03/03/87
17.	4,699,629	Croudace et al.: FUEL COMPOSITION AND METHOD FOR CONTROL OF OCTANE REQUIREMENT INCREASE 10/13/87
18.	4,720,288	Croudace et al.: GASOLINE FUEL COMPOSITION 01/19/88
19.	4,743,273	Croudace et al.: FUEL COMPOSITION AND METHOD FOR CONTROL OF ENGINE OCTANE REQUIREMENTS 05/10/88
20.	4,773,916	Croudace et al.: FUEL COMPOSITION AND METHOD FOR CONTROL OF OCTANE REQUIREMENT INCREASE 09/27/88
21.	4,781,728	Jessup et al.: OCTANE ENHANCERS FOR FUEL COMPOSITIONS 11/01/88
22.	4,812,146	Jessup et al.: LIQUID FUELS OF HIGH OCTANE VALUES 03/14/89
23.	4,844,717	Croudace et al.: FUEL COMPOSITION AND METHOD FOR CONTROL OF ENGINE OCTANE REQUIREMENTS 07/04/89

MORGAN & FINNEGAN, L.L...

David W. Beehler, Esq. October 16, 1995 Page 4

24. 5,032,144

Jessup et al.: OCTANE ENHANCERS FOR FUEL COMPOSITIONS 07/16/91

REFERENCES:

Brown, J.E., Greenlee, K.W., Tindall, E.M., "Octane Numbers of Pure Hydrocarbon Blends and Their Relationship To Precombustion Reactions," American Petroleum Institute's Division of Refining, Vol. 42, [III] (1962).

Fleming, R.D., Eccleston, D.G., "The Effect of Fuel Composition. Equivalence Ratio, and Mixture Temperature on Exhaust Emissions," SAE Technical Paper Series, 710012, Automotive Engineering Congress, Detroit, Michigan, January 11-15, 1971.

Zaghini, N., Mangolini S., Arteconi, M., and Sezzi, F., "Polynuclear Aromatic Hydrocarbons In Vehicle Exhaust Gas," SAE Technical Paper Series, 730836, National Combined Farm, Construction & Industrial Machinery and Fuels and Lubricants Meetings, Milwaukee, Wisconsin, September 10-13, 1973.

Morris, W.E., "The Interaction Approach to Gasoline Blending," presented at the National Petroleum Refiners Association Annual Meeting, San Antonio, Texas, March 23-25, 1975.

Hurn, R.W., "Evaporative Emissions - Which Volatility Factors Count?" Effect of Automotive Emission Requirements on Gasoline Characteristics, ASTM STP 487, presented at the Seventy-Third Annual Meeting of the American Society for Testing and Materials, Ontario, Canada, June 21-26, 1970, pp. 3-12.

Date, K., Nishizaki, T., and Maeda, T., "Road Octane Number Trends of Japanese Passenger Cars," SAE Technical Paper Series, 770811, Passenger Car Meeting, Detroit Plaza, Detroit, Michigan, September 26-30, 1977.

Knaus, J.A., Lockerbie, T.E., Buerstetta, F.D., and Warren, T.W., "Road Octane Improvement - A Basis For Process Evaluation," presented at the Thirteenth Southwest Regional Meeting of the American Chemical Society, Tulsa, Oklahoma, December 5-7, 1957.

MORGAN & FINNEGAN, L.L. .

David W. Beehler, Esq. October 16, 1995 Page 5

Anglo-Iranian Oil Co., Ltd. et al., "High-Octane Aviation Fuel by the Sulfuric-Acid Alkylation Process," presented at the Twentieth Annual Meeting of the American Petroleum Institute in Chicago, Illinois, November 9-17, 1939.

Carr, R.C., Starkman, E.S., and Sawyer, R.F., "The Influence of Fuel Composition on Emissions of Carbon Monoxide and Oxides of Nitrogen," SAE Technical Paper Series, 700470, Mid-Year Meeting, Detroit, Michigan, May 18-22, 1970.

Davis, H.P., Uyehara, O.A., and Myers, P.S., "The Effects of Knock On The Hydrocarbon Emissions Of A Spark-Ignition Engine," SAE Technical Paper Series, 690085, International Automotive Engineering Congress, Detroit, Michigan, January 13-17, 1969.

Duke, L.C., Lestz, S.S., and Meyer, W.E., "The Relation Between Knock And Exhaust Emissions Of A Spark Ignition Engine," SAE Technical Paper Series, 700062, Automotive Engineering Congress, Detroit, Michigan, January 12-16, 1970.

Nelson, E.E., "Hydrocarbon Control For Los Angeles By Reducing Gasoline Volatility," SAE Technical Paper Series, 690087, International Automotive Engineering Congress, Detroit, Michigan, January 13-17, 1969.

Mulac, J.C., McCafferty, R.L., and Meyer, W.A.P., "Carburetor Evaporation Losses - Volatility and Reactivity," presented at the 31st Mid-Year Meeting of the American Petroleum Institute's Division of Refining, Houston, Texas, May 11, 1966.

McKinney, C.M. and Blade, O.C., "Bureau of Mines - API Survey of Aviation Gasolines, 1969," SAE Technical Paper Series, 700228, National Business Aircraft Meeting, Wichita, Kansas, March 18-20, 1970.

Wentworth, J.T., "Carburetor Evaporation Losses," SAE Transactions, 1955. Presented at January 1958 SAE Annual Meeting.

Adams, F.H., "New Technology Complements An Aliphatic Route To Future Gasolines," Proceedings of the American Petroleum Institute's Division of Refining, 1973. Presented at the 38th Mid-Year Meeting of the American Petroleum Institute's Division of Refining, Philadelphia, Pa., May 14-17, 1973.

"Is Reformulated Gasoline A 'New' Gasoline," EPA - Office of Mobile Sources, Technical Overview, EPA 420-F-95, April 1995.

MORGAN & FINNEGAN, L.L. .

David W. Beehler, Esq. October 16, 1995 Page 6

Zwicker, S.L., "Vapor Emission Controls," National Petroleum Refiners Association, FL-85-89. Presented at the 1985 Fuels & Lubricants Meeting, Houston, Texas, November 7-8, 1985.

Oberfell, G.G. et al., "Thermal Alkylation and Neohexane," presented at the Twentieth Annual Meeting of the American Petroleum Institute, Chicago, Illinois, November 9-17, 1939.

Duffy, L.J., Everett, N.R., Sevcik, J.J., and Piehle, F.J., "Keeping The Lead Out of Unleaded Gasolines," Proceedings of the American Petroleum Institute's Division of Refining, 1972. Presented at the 37th Mid-Year Meeting of the American Petroleum Institute's Division of Refining, New York, New York, May 8-11, 1972.

Gibbs, L.M., "The Impact of ASTM Specifications On State Motor Fuel Regulations," Proceedings of the American Petroleum Institute's Division of Refining, 1986. Presented at the 51st Mid-Year Meeting of the American Petroleum Institute's Refining Department, San Diego, California, May 12-15, 1986.

Croudace, M.C. and Jessup, P.J., "Studies of Octane Properties of Mixtures of Isomeric Hexanes," SAE Technical Paper Series, 881604, International Fuels and Lubricants Meeting and Exposition, Portland, Oregon, October 10-13, 1988.

Pendleton, P.O., "Automotive Gasoline Usage In Reciprocating Aircraft Engines," SAE Technical Paper Series, 871012, General Aviation Aircraft Meeting and Exposition, Wichita, Kansas, April 28-30, 1987.

Very truly yours,

Batt Verfeiers

Bartholomew Verdirame

JADG:llm